Reducing Customer Acquisition Soft Costs through Randomized Controlled Experiments

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Soft Costs of Customer Acquisition: Many Opportunities for improvement

Marketing and advertising

- Messaging
- Advertising channel:
 Direct mail, phone calls, TV/Radio ads, web

Incentives

- Cash back
- Free gifts

Referral programs

- Messaging
- Reward structure
- Program structure (how/when customers are approached)

Which strategies have the biggest bang for the buck?

Common approach: Post-hoc evaluation



Let's say conversion rate is higher than in the past.

Did iPad promotion boost sales?

Not necessarily.

Common approach: Post-hoc evaluation



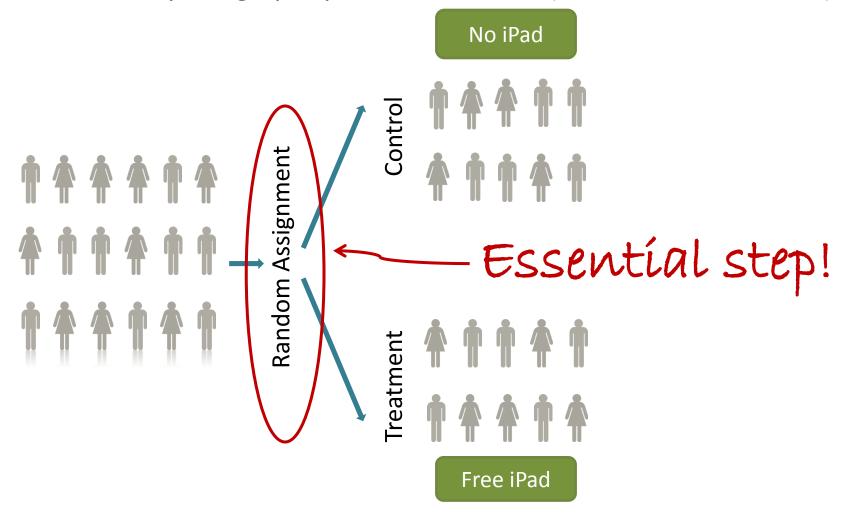
Problems with this approach:

- We don't know the counterfactual.
- People may have adopted anyway.
- Demand for PV may have naturally increased.
- We can't account for outside influences (new gov't incentives, media coverage of PV, etc.)

Risk: May invest in costly acquisition strategies that are actually ineffective.

Better approach: Randomized Controlled Trial

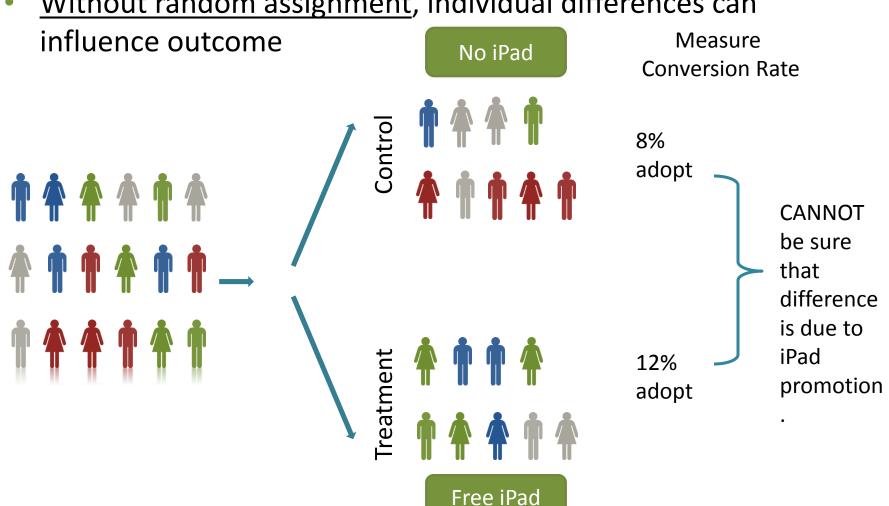
- Have a comparison (control) group
- Randomly assign people to conditions (treatment or control)



Better approach: Randomized Controlled Trial

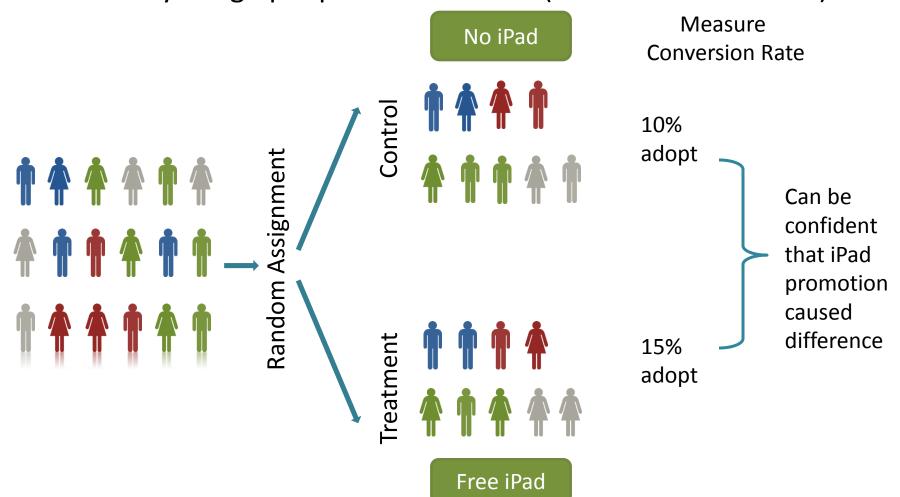
Have a comparison (control) group

Without random assignment, individual differences can



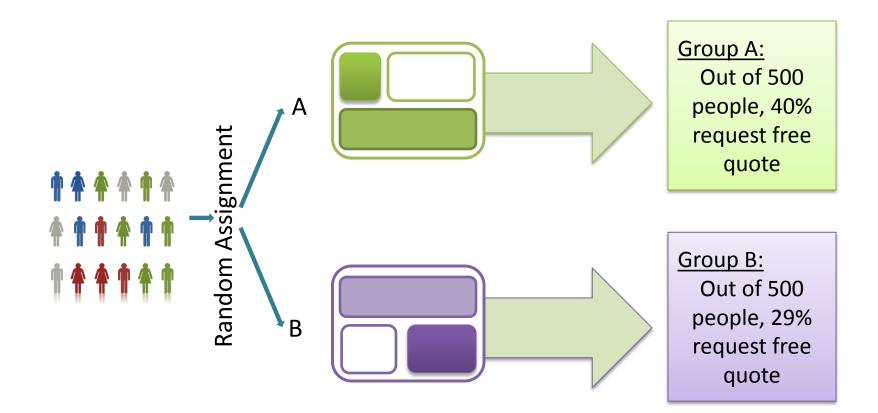
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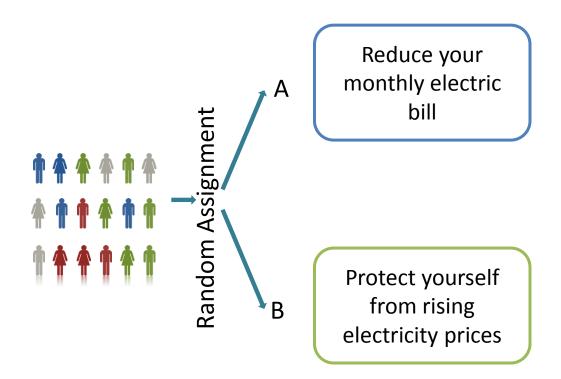
Using RCTs: What's the best marketing strategy?

Website design (A/B split testing)



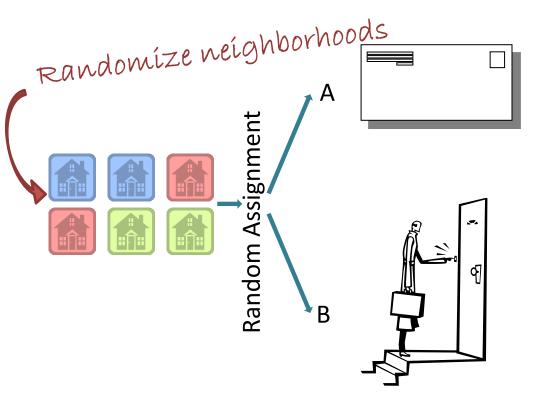
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- Messaging wording or framing



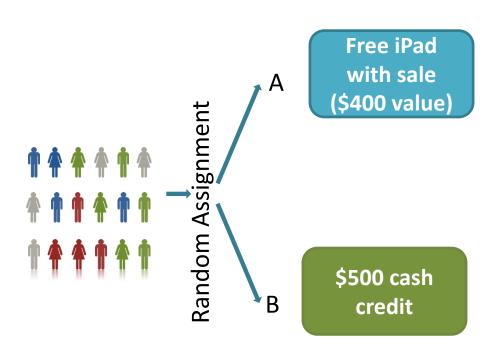
Using RCTs: What's the best marketing strategy?

- Website design (A/B split testing)
- Messaging wording or framing
- Outreach channels



Using RCTs: What are the best incentives?

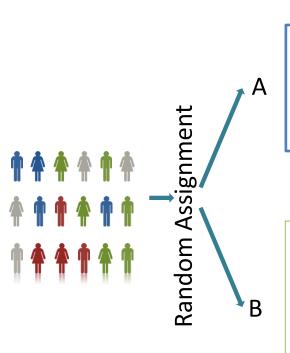
Types/value of incentives



Using RCTs: How can we leverage social influence?

NREL SEEDS Study

Can we win back lost leads using social validation?



Fact-based messaging

"Solar systems have no moving parts, so there is very little ongoing maintenance required."

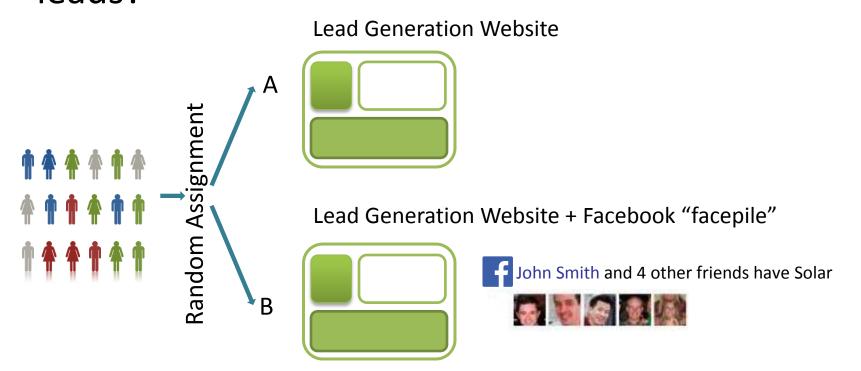
Normative messaging

"In a recent survey, 87% of current PV adopters in California said their system has required little to no maintenance."

Using RCTs: How can we leverage social influence?

NREL SEEDS study

- Can we win back lost leads using social validation?
- Does social proof help generate and retain new leads?



To learn more...

About participating in NREL SEEDS project

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Visit project site: www.nrel.gov/seeds

Project e-mail: Free.Study@NREL.gov

About Randomized Controlled Trials



Report:

Evaluation, Measurement, and Verification of Residential Behavioral-Based Energy Efficiency Programs: Issues and Recommendations

www.seeaction.energy.gov

Extra Slides

Blocking

